REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

The specification is amended by the present response to correct minor grammatical and idiomatic informalities. The changes made to the specification are deemed to be self-evident from the original disclosure, and thus are not deemed to raise any issues of new matter.

Applicants also note that with the Office Action of October 5, 2004, forms PTO-1449 were returned to applicants indicating the acknowledgement of references cited thereon. However, applicants note that one of the forms apparently inadvertently did not initial a reference AW. For convenience a copy of that form PTO-1449 is provided, and applicants respectfully request that a new form PTO-1449 be provided that initials reference AW.

Claims 1-42 are pending in this application. Claims 39-42 are added by the present response. Claims 1-14, 36, and 37 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. patent 6,167,252 to Cohen. Claims 15-35 and 38 were rejected under 35 U.S.C. § 103(a) as unpatentable over Cohen in view of U.S. patent 6,449,473 to Raivisto.

Initially, applicant and applicants' representative wish to thank Examiner Contee for the interview granted applicants' representative on October 26, 2004. During the interview the outstanding rejections were discussed in detail. Further, during the interview applicants' representative presented comments as to how the present invention distinguishes over the applied art. Claim amendments to clarify the claimed features over the applied art were also discussed. The present response sets forth those discussed claim amendments. Examiner Contee indicated that she would further consider such amended claims when formally presented in a filed response.

Addressing the above-noted rejections based on Cohen, and further in view of Raivisto, those rejections are traversed by the present response.

The claims are amended by the present response to clarify features recited therein. Specifically, independent claim 1 clarifies a structure in which the radio communication control unit processes data based on protocol to judge a data kind and outputs that processed data. Further, a confidentiality/integrity processing unit inputs a control signal and the processed data processed based on protocol from the radio communication control unit, and performs at least one of encryption or message authentication on that data based on the judged data kind. According to such claimed features, and with reference to Figure 3 in the present specification as a non-limiting example, several figures in the specification showing other non-limiting examples, a radio communication control unit 20 processes input data based on a protocol and outputs that processed data, see output data 92. That processed data is then provided to a confidentiality/integrity processing unit 40.

With such a structure in a claimed invention, the data provided to the confidentiality/integrity processing unit is data that has already been processed, and is thus data of a higher layer than input data to the radio communication control unit 20.

Figure 24 in the present specification shows a Background Art in which a confidentiality processing unit 540 is a part of a radio communication unit 530. That radio communication unit 530 receives data prior to being processed, which data is indicated as being of a "Layer 1". Thus, in that Background Art of Figure 24, the confidentiality processing unit 540 can only process data on the Layer 1. As a result, that confidentiality processing unit 540 cannot discriminate on the type of data to perform processing because all the data provided to the radio communication unit 530 is at the same level, i.e., is at Layer 1.[1]

The applicants of the present invention recognized that it would be beneficial to allow more selective confidentiality processing by allowing confidentiality processing to occur at a

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[1] See for example the present Specification at page 2, lines 4-16.

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higher layer, described in the present specification as a "Layer 2". To achieve that objective

in the claimed invention, a radio communication control unit first processes input data based

on a protocol to judge a data kind, and thereby generates processed data, i.e. the processed

data is of the Layer 2. That processed data (of Layer 2) is then provided to a

confidentiality/integrity processing unit. Thus, the data confidentiality processing or data

integrity processing can be performed at a second layer, i.e. Layer 2.[2] As a result, in the

claimed invention it is possible to discriminate the data kind at the Layer 1 and perform the

confidentiality or integrity processing data at the higher layer, i.e. at Layer 2, based on a

judged data kind.[3]

The above-noted features are believed to clearly distinguish over the applied art.

The outstanding rejection cites as a primary reference <u>Cohen</u>. However, the

outstanding rejection is first not understood, and second is not believed to meet the claimed

features.

With respect to the limitation directed to the "radio communication control unit", the

outstanding Office Action cites <u>Cohen</u> at column 6, lines 35-57, and with respect to the

"confidentiality/integrity processing unit", the outstanding Office Action cites <u>Cohen</u> at

column 7, line 38 to column 8, line 60.

In that respect, applicants note <u>Cohen</u> at column 6, lines 35-57 provides a disclosure

directed to a microcontroller 260 and a base band processor 240. Further, at column 7, line

38 to column 8, line 60 <u>Cohen</u> provides a disclosure directed to a microcontroller 860 and a

base band processor 840.

What the Office Action is citing with respect to the above-noted claim elements are

essentially the same elements in <u>Cohen</u> in different embodiments. That is, the

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[2] See for example the present Specification at page 14, lines 9-12.
[3] See for example the present Specification at page 15, line 19 to page 16, line 10.

microprocessor 260 and the base band processor 240 in Figure 2 are essentially equivalent to the respective microcontroller 860 and base band processor 840 in Figure 8, but they are merely just different embodiments. Combining such identical elements in different embodiment is not believed to be proper or clear.

Moreover, in either event applicants note <u>Cohen</u> does not appear to disclose or suggest any structure in which a radio communication control unit processes data based on a protocol to judge a data kind, and wherein that processed data is provided to a confidentiality/integrity processing unit based on the judged data kind.

As discussed above, such a structure in the claimed invention provides the result that data of a higher layer than input data, for example if data is input at Layer 1 data of the higher Layer 2, can be subjected to a confidentiality/integrity processing based on a judged data kind. Such an operation in the claims allows discrimination of the confidentiality/integrity processing based on a kind of input data.

<u>Cohen</u> does not teach or suggest any similar features or operations. That is, <u>Cohen</u> does not disclose or suggest that any of the element of the microcontrollers 260, base band processor 240, microcontroller 860, and base band processor 840 operate in conjunction to process data based on a protocol and output processed data, and to then subject the processed data to a confidentiality/integrity processing.

In such ways, applicants respectfully submit the claims as currently written distinguish over the teachings in <u>Cohen</u>.

Moreover, no teachings in <u>Raivisto</u> are believed to overcome the above-noted deficiencies in <u>Cohen</u>.

In view of these foregoing comments, applicants respectfully submit claims 1-38 as currently written distinguish over the applied art.

The present response also sets forth new claims 39-42 for examination, of which new claims 39 and 42 are independent. Those new claims are believed to be fully supported by the original specification. For example, new claim 39 finds support in the original specification at page 15, line 19 to page 16, line 10 (referencing data at layer 2) and at page 16, line 25 to page 17, line 16 (disclosing selectively performing confidentiality/integrity processing based on the data kinds). New independent claim 40 is fully supported by the original specification for example at page 28, lines 16-18, page 28, line 23 to page 29, line 8 (disclosing different data kinds), and at page 17, lines 14-16 (disclosing that the control signal 91 includes parameters such as a key, an initial value, selection between the confidentiality processing and the integrity processing). Claim 41 is fully supported by the original specification for example at page 29, line 24 to page 30, line 5. Claim 42 is also supported by the original specification at the above-noted disclosures and at page 14, lines 9-12. Further, new claims 39-42 are believed to be allowable for similar reasons as discussed above.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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	FILING DATE August 27, 2001	GROUP 2685 Technology Center 2600

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
✓	AA	6,016,350	01/18/2000	C. FUNABE, et al.	—	—	
✓	AB	5,987,137	11/16/99	A. KARPPANEN, et al.			
	AC						
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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES	NO
✓	AO	WO 97/13353	04/10/97	WIPO		
✓	AP	0 464 563	01/08/92	EUROPE		
✓	AQ	WO 98/49855	11/05/98	WIPO		
	AR					
	AS					
	AT					
	AU					
	AV					

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

	AW	ETSI TS 133 102 V3.3.1, pgs. 1-60, XP-002167547, "UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM (UMTS); 3G SECUTIRY; SECURITY ARCHITECHTURE (3G TS 33.102 VERSION 3.3.1 RELEASE 1999)", January 1, 2000
	AX	
	AY	
	AZ	☐ Additional References sheet(s) attached

Examiner	Date Considered 2/29/(4

*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.